

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
10 August 2006 (10.08.2006)

PCT

(10) International Publication Number  
WO 2006/083284 A2

(51) International Patent Classification: Not classified

(21) International Application Number:  
PCT/US2005/019340

(22) International Filing Date: 1 June 2005 (01.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/575,953 1 June 2004 (01.06.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, VU, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(b))

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A MATERIAL COMPOSITION FOR NANO- AND MICRO-LITHOGRAPHY

(57) Abstract: A material composition, which is used as a liquid resist, includes a first component comprising a monomer portion and at least one cationically polymerizable functional group, and a crosslinker reactive with the first component and comprising at least three cationically polymerizable functional groups. The material composition also includes a cationic photoinitiator. Upon exposure to UV light, the material composition crosslinks via cure to form a cured resist film that is the reaction product of the first component, the crosslinker, and the cationic photoinitiator. An article includes a substrate layer and a resist layer formed on the substrate layer from the material composition.

WO 2006/083284 A2